Form 7765—Reissue
May 14, 1909

INSTRUCTIONS

FOR USING

SINGER SEWING MACHINE

No. 27-4

FOR FAMILY USE

THE SINGER MANUFACTURING CO.

THE IMPORTANCE OF GOOD OIL
FOR
SEWING MACHINES

There is nothing connected with a Sewing Machine which better illustrates the proverb that " the best is the cheapest," than the small but important item of OIL.

BAD OIL does not last as long as good oil and is really more expensive.

BAD OIL makes a Machine run hard.

BAD OIL leaves a SEDIMENT and the oily portion is soon exhausted.

BAD OIL clogs the oil holes so that it does not reach the bearings and thus prevents the efficient working of the Machine, besides causing rapid wear of the parts.

Knowing, from many years' experience, the great: importance of *Good Oil*, we put up an *Extra Quality Machine Oil*, in Bottles,

SPECIALLY PREPARED FOR SEWING MACHINES.

N. B.- See that the words "The Singer Manufacturing Company" are moulded in relief upon the bottle.

INSTRUCTIONS

FOR USING

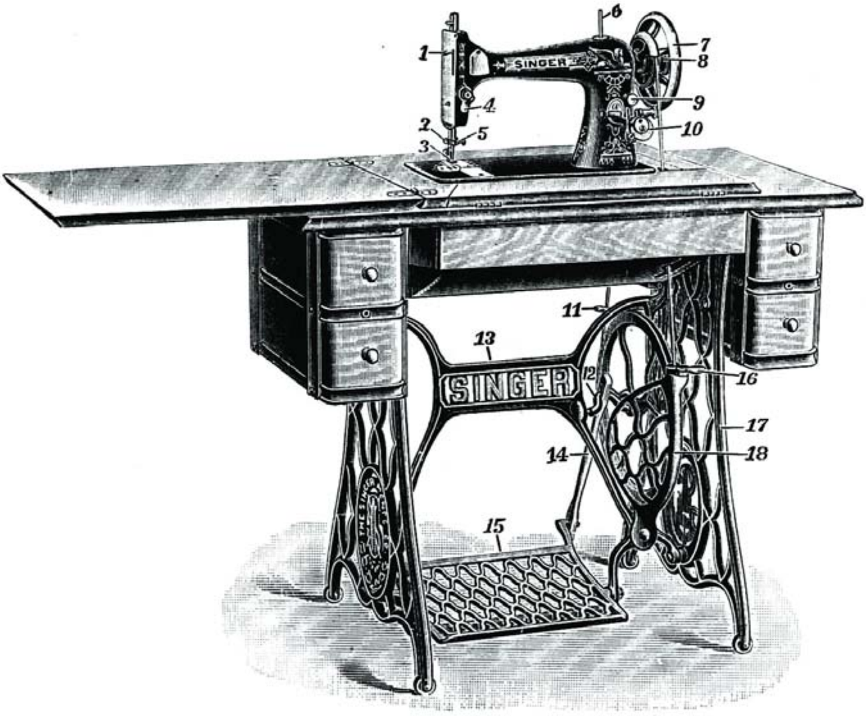
SINGER SEWING MACHINE

No. 27-4 on Seven Drawer Embossed Cabinet Table

No. 27 - 4

FOR FAMILY USE

THE SINGER MANUFACTURING CO.



1. Thread Take-up Lever.
2. Thread Cutter.
3. Presser Foot.
4. Tension Releaser.
5. Needle Clamp.
6. Spool Pin.
7. Balance Wheel.
8. Stop Motion.
9. Stitch Regulating Thumb Screw.
10. Bobbin Winder.
11. Belt Guide.
12. Band Wheel Crank.
13. Brace.
14. Pitman.
15. Treadle.
16. Belt Shifter.
17. Leg.
18. Dress Guard.

SINGER SEWING MACHINE NO. 27-4

DESCRIPTION

Machine No. 27-4 is designed for family sewing and provided with strong, automatic mechanism for making the Lock Stitch from two threads and for feeding or moving the fabric along after each stitch is formed, so as to make stitches of uniform length.

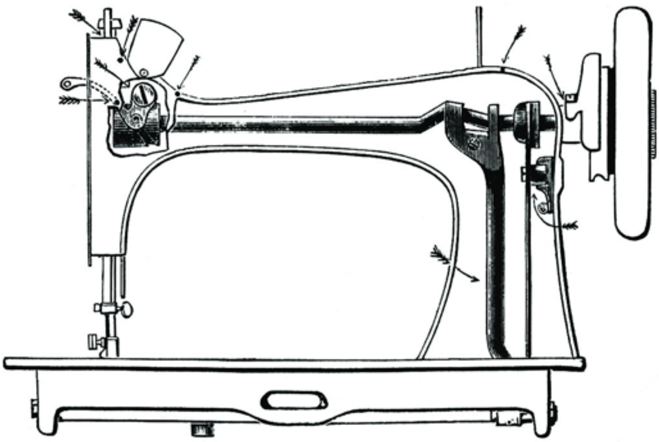


FIG. 3

NO. 27-4. PARTS IN ARM—OILING PLACES SHOWN BY ARROWS

TO OIL THE MACHINE

To insure the light and quiet running of the machine, it is necessary that the surfaces of the moving parts that are in contact with each other should always be covered with a film of oil and not allowed to become dry. The arrows in Figs. 3 and 4 point to the places where oil, in small quantities, should be applied every day when the machine is in constant use. If the machine has not been used for some time, kerosene or benzine should be used to clean off the old oil, the machine run rapidly a few moments, wiped clean and the parts then freshly oiled with the best Sewing Machine Oil.

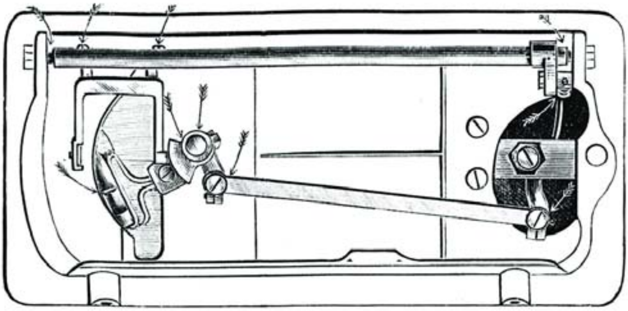


Fig. 4

No. 27-4. Parts Under Bed Plate—Oiling Places Shown by Arrows

The parts under the bed plate, Fig. 4, can be reached by turning the machine back on its hinges. The parts at the right hand, inside the arm, can be seen if the plate on the back of the arm is taken off. For cleaning and thorough oiling, the face plate, on the end of the arm at the left, can be taken off if the two screws which fasten it are removed; the smaller cover on the arm in front of the operator can be turned around, as shown in Fig. 3, to reach the parts covered by it. Only one drop of oil is necessary in each place, more than this amount will be of no benefit.

The stand should be oiled at each end of the treadle where the pivot screws enter it, at both ends of the wood pitman and at the ends of the hand wheel shaft.

TO OPERATE THE TREADLE

Release the balance wheel by turning the stop motion on the outside of the balance wheel over toward you as far as it will go; the balance wheel will then turn freely without moving the sewing mechanism; place both feet squarely upon the treadle and turn the balance wheel by hand over toward you; this will start the band wheel, treadle and pitman; continue the motion thus begun by the pressure of the feet, first on one, then on the other side of the treadle, until the balance wheel can be kept in continuous rotation by the feet alone; then turn the stop motion over from you as far as possible, raise the presser foot by the lifter on the back of the arm, and run the machine without trying to sew until you can without any difficulty keep up a regular motion.

TO TAKE OUT THE SHUTTLE AND BOBBIN

Pull out the front slide in the bed plate; turn the balance wheel over toward you until the shuttle in its carrier is as far as possible toward you and press down upon the point of the shuttle; this will raise the back end of the shuttle so that it can be easily lifted out and the bobbin removed.

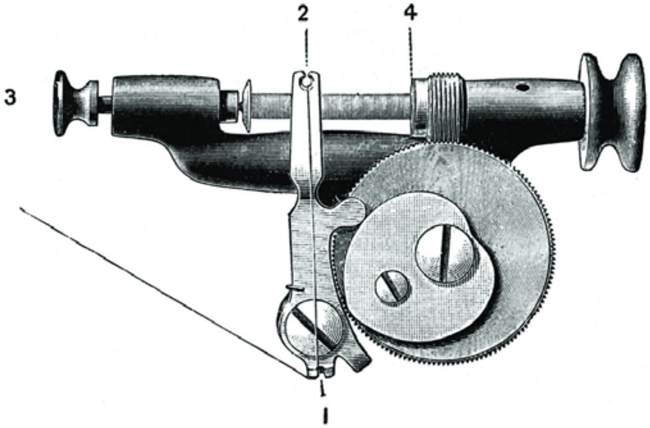


Fig. 5

TO WIND THE BOBBIN OF UNDER THREAD

(See Figs. 5 and 9)

Pull the upper part of the bobbin winder toward you until the pulley at the right touches the belt, turn the large screw called the stop motion, which is outside the centre of the balance wheel, over toward you as far as it will go; the balance wheel will then turn loosely without moving the stitching mechanism; place the spool of under thread upon the spool pin on the arm and lead the thread into the eyelet (1, Fig. 9) on the face plate, then to the lower eyelet in the bobbin winder thread guide (1, Fig. 5) and into the upper eyelet (2) in the same piece; draw the knob (3) at the left hand to the left and place the bobbin between the cup (4) at the right and the centre hole at the left, at the same time placing the end of the thread between the cup and the end of the bobbin; release the knob (3), turn the balance wheel as in sewing and the bobbin will be wound regularly and automatically; take the filled bobbin out of the bobbin winder; push the bobbin winder back and turn the stop motion over from you to clamp the balance wheel.

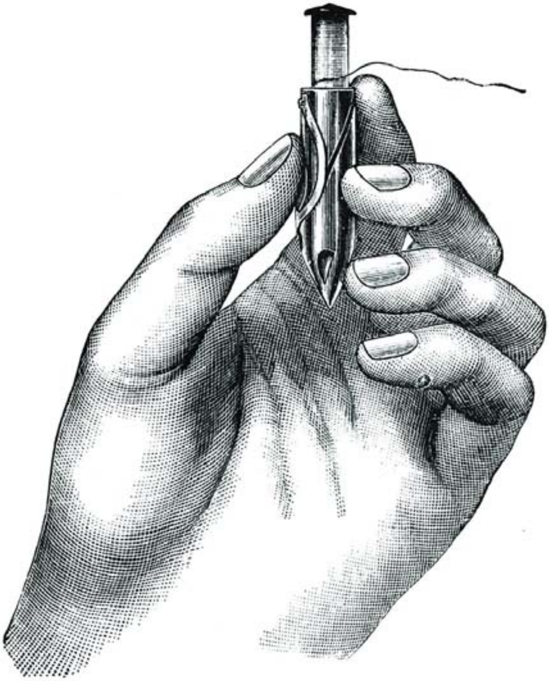


FIG. 6

TO THREAD THE SHUTTLE

Take the shuttle between the thumb and fingers of the left hand with its point toward you, put the bobbin in the shuttle with the thread drawing from it over toward the right, as shown in Fig. 6.

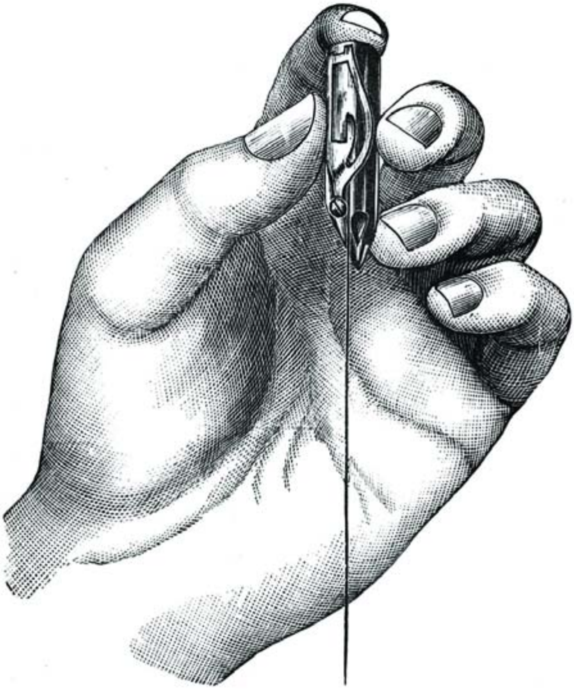


FIG. 7

When the bobbin is in its place put a slight pressure on the end of it with the forefinger of the left hand and draw the free end of the thread into the long slot in the shuttle body in the direction of the point of the shuttle as far as it will go, as shown in Fig. 7.

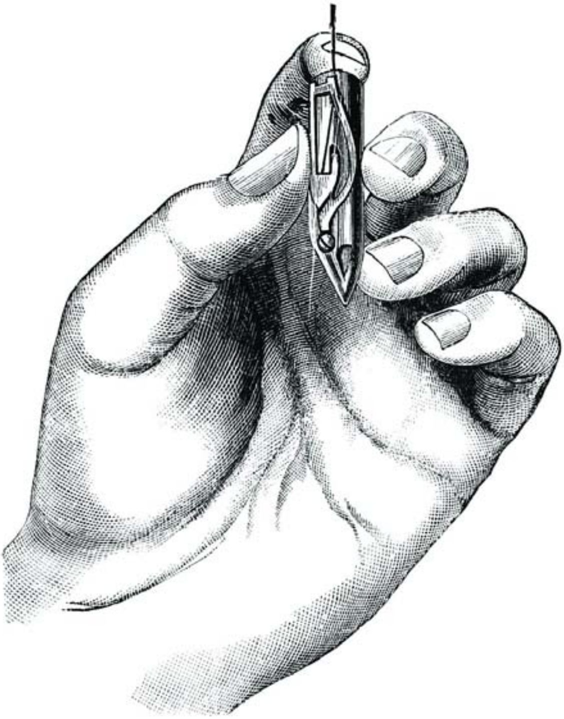


FIG. 8

Draw toward the back end again, until the thread lies under the spring exactly as shown in Fig. 8 and until the bobbin commences to revolve. This completes the threading of the shuttle.

TO SET THE NEEDLE

Raise the needle bar to its highest point; hold the needle in the left hand with the flat side of the shank toward the right, push it up to the needle clamp as far as it will go and fasten by the thumb screw; no further adjustment of the needle will be necessary.

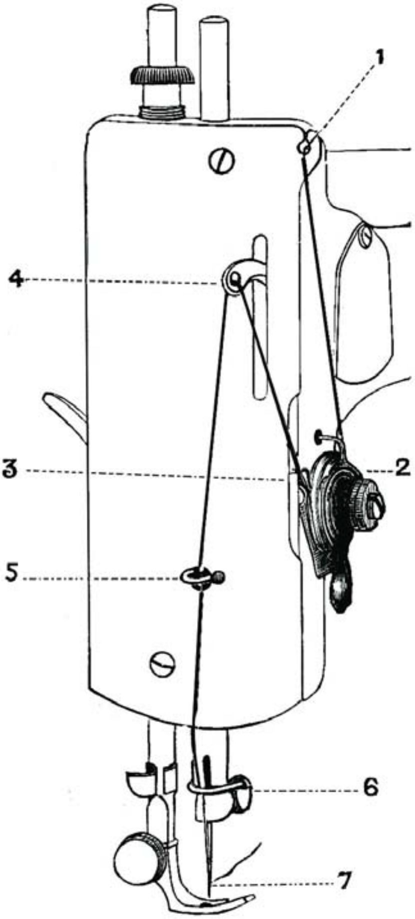


Fig. 9

TO THREAD THE NEEDLE

(See Fig. 9)

Place the spool of upper thread upon the spool pin on the arm; lead the thread from the spool into the eyelet (1) in the upper edge of the face plate, down and around from right to left under the tension releaser and between the tension discs (2), into the eye of the thread take-up spring (3), up and through the hole in the take-up lever (4), into the thread guide (5), in front of the face plate, under the thread guide (6) near the lower end of the needle bar, and from left to right through the eye (7) of the needle.

TO PREPARE FOR SEWING

Before commencing to sew take hold of the end of the needle thread, leaving it slack from the hand to the needle and turn the balance wheel toward you until the needle moves down and up again to its highest point; the needle thread has then been carried around the under thread, which can be drawn up through the hole in the throat plate by the needle thread and both should then be laid back under the presser foot.

TO COMMENCE TO SEW

Place the material under the needle, let the presser foot down upon it, and start the machine, turning the balance wheel over toward you.

TO REGULATE THE TENSION

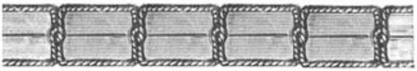


Fig. 10

For ordinary stitching the upper and under threads should be locked in the centre of the thickness of the material, as shown in Fig. 10.

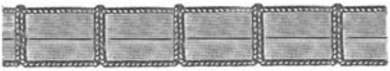


Fig. 11

If the upper thread is held too tightly by its tension, or if the under thread is too loose, the thread will lie straight along the upper surface of the material, as shown in Fig. 11.

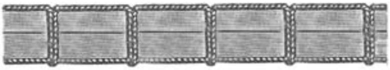


Fig. 12

If the under tension is too tight or the upper too loose the thread will lie straight along the under side of tie material, as shown in Fig. 12.

The under tension is regulated by a small screw near the point of the shuttle on its upper side (see Fig. 7); turn this screw around to the right to make the thread draw off harder, or to the left to make it draw easier; after this tension has been once properly adjusted it is rarely necessary to change it, as a correct stitch can usually be obtained by varying the tightness of the upper thread; it is regulated by the thumb screw, spring and discs on the arm, directly in front; turn the thumb screw over to the right to make the upper thread tighter, or to the left to make it looser.

TO TURN A CORNER

Stop the machine while the needle is rising but before it is out of the material, raise the presser foot, and turn the corner, using the needle as a pivot.

FOR SEWING FLANNEL OR BIAS SEAMS

Use a short stitch and light tensions so that there will be sufficient thread in the seam to allow the goods to stretch if necessary.

TO REMOVE THE WORK

Let the thread take-up rest at its highest point; raise the presser foot and draw the fabric back and to the left two inches or more, at the same time pressing with the thumb of the right hand on the tension releasing lever under the tension discs; cut the threads close to the goods, leaving the ends under the presser foot.

TO ALTER THE LENGTH OF STITCH

Upon the side of the arm near the bobbin winder is a large thumb screw; turn it over to the right to make the stitch longer, or to the left to make it shorter.

TO CHANGE THE PRESSURE OF THE PRESSER FOOT ON THE MATERIAL

Turn the large thumb screw at the top of the arm, directly over the presser foot, to the right to make the pressure heavier, or to the left to make it lighter; the pressure should be only heavy enough to prevent the material rising with the needle and to ensure that the feed moves the work along evenly; a heavier pressure would make the machine run harder and be of no benefit.

NEEDLES

Needles for No. 27-4 Machine are of Class and Variety 15x 1 and are made in sizes suitable for the different sizes of thread.

When ordering needles give the quantity and size required, also the class and variety numbers separated by x. An order for a dozen No. ½ needles should read:

"One Doz. No. ½, 15 x 1 Needles," in packages.

RELATIVE SIZES OF NEEDLES AND THREAD

Sizes of Needles	CLASS OF WORK TO SEW	SIZES OF COTTON, LINEN OR SILK
O	Very thin Muslin, Cambrics, Linens, etc	100 to 150 Cotton, OOO,OO Silk Twist.
B	Very fine Calicoes, Linens, Shirtings, fine Silk Goods, etc.	80 to 100 Cotton, Silk Twist.
½	Shirtings, Sheetings, Bleached Calicoes, Muslins Silk and general domestic goods and all classes of general work.	60 to 80 Cotton, A&B Silk Twist.
1	All kinds of heavy Calicoes, light Woolen Goods, heavy Silk, Seaming, Stitching, etc.	40 to 60 Cotton, C Silk Twist.
2	Tickings, Woolen Goods, Trousers, Boys' Clothing, Corsets, Cloaks, Mantels, etc.	24 to 40 Cotton, D Silk Twist
3	Heavy Woolens, Tickings Bags, Heavy Coats, Trousers, etc. Heavy Clothing generally.	40 to 30 Cotton, E Silk Twist. 60 to 80 Linen

TWIST, LINEN AND COTTON THREAD AND NEEDLES

Do not use poor thread or needles. Any good thread will work well, but you must not expect to make a smooth, even stitch with poor, rough thread, nor can you expect a machine to work well with a cheap grade of needles made in imitation of ours. It is our interest to maintain the reputation of the *machine*, and therefore we always supply the best. Persons living at a distance from a Singer Store can send by mail, enclosing the money, and orders will be promptly filled and forwarded by mail or express.

THE BELT

The leather belt which gives motion to the machine should always be tight enough not to slip and no tighter; not so tight as to prevent the easy motion of the machine. If the belt is too long, uncouple it and cut off squarely from one end to the desired length.

Be sure that the slide over the shuttle race is kept closed when running the machine, otherwise the shuttle may be caught and the machine broken.

THE NEW SINGER STAND BRACE

(WITH BELT THROW-OFF)

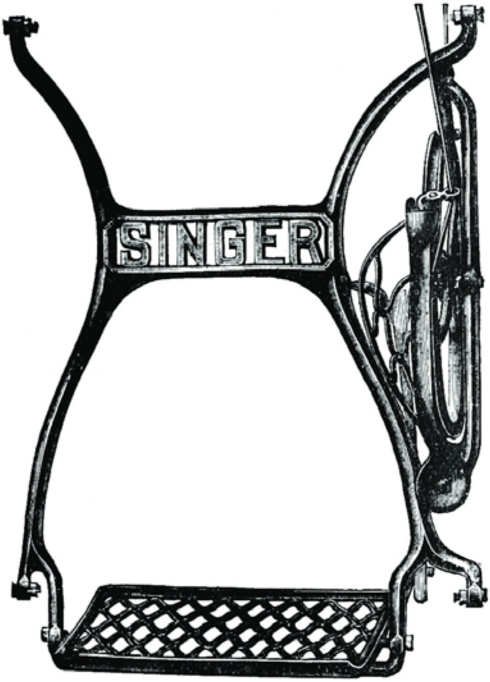


FIG. 13

Fig. 13 shows the Stand Brace, carrying the entire driving mechanism.

Both the band wheel and treadle work upon adjustable centres, which admit of accurate adjustment with a minimum amount of friction.

This distinctive feature renders it the lightest running of any sewing machine stand yet constructed, and is a matter of great importance to the health and comfort of the operator.

THE NEW SINGER BELT SHIFTER

This invention simplifies and makes easy the often irritating task of throwing off and replacing the belt. To throw off the belt press the small lever at the top of the dress guard to the left with the forefinger, keeping up the motion of the treadle meanwhile. To put on the belt, allow the lever to spring back in its place, and operate the treadle as in sewing (with the wheel turning toward you), when a single revolution of the wheel will bring the belt back in place.

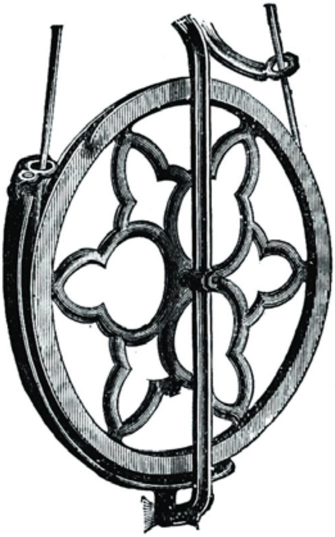


FIG. 14

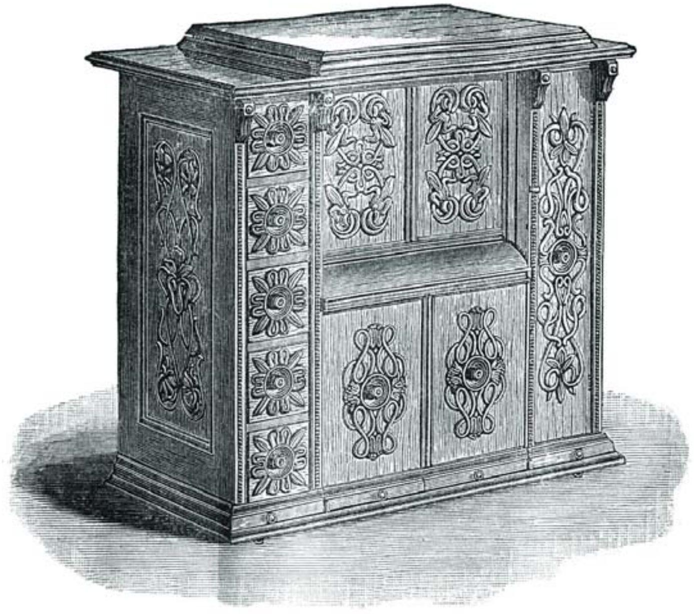


FIG. 15

DRAWING ROOM CABINET (CLOSED)

To open the cabinet turn over the leaf which covers the machine, release the platform upon which the machine is fastened by pressing the button at the right of the operator near the bottom of the upper right door, first taking hold of the arm of the machine with the left hand to steady it as it rises; when entirely up push back the upper doors, which then become a firm support for the platform and open out the lower doors. See page 15.

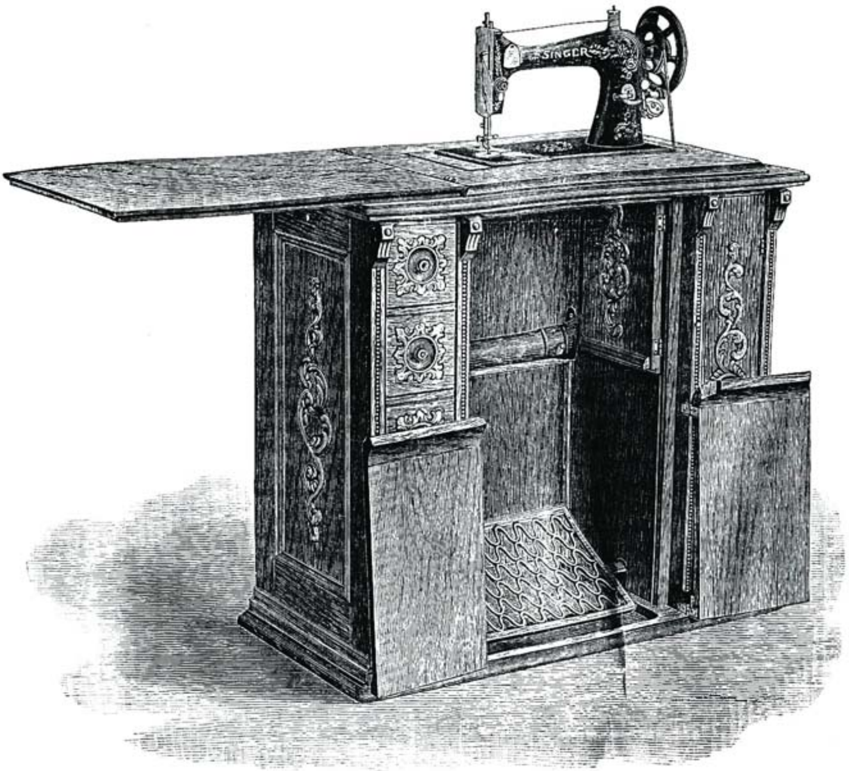


FIG. 16

DRAWING ROOM CABINET (OPEN)

To close the cabinet, bring the upper doors to the front and close the lower ones, as shown on page 14. Pressure upon the machine will then force it down beneath the top of the cabinet and after the platform is latched the leaf is folded over the aperture, completely enclosing the machine.

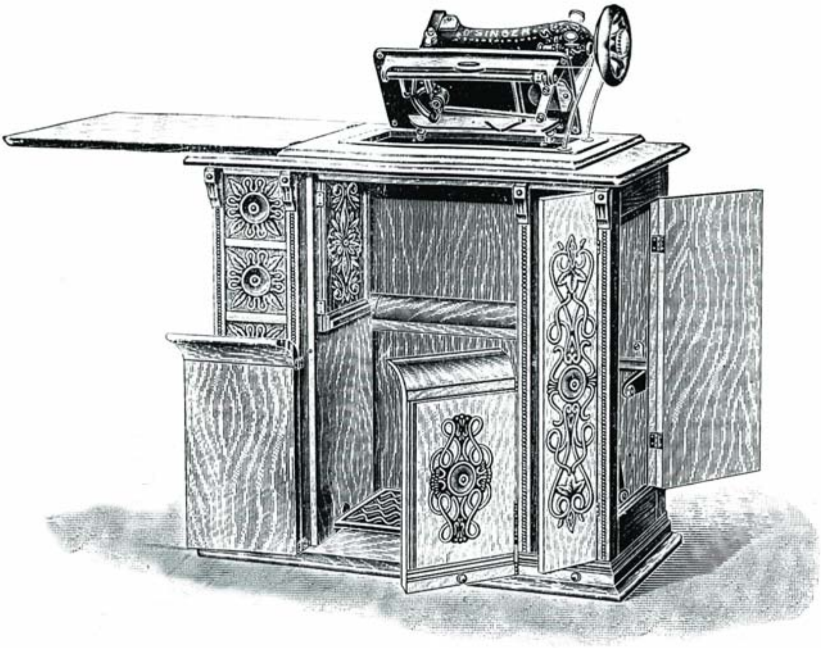


FIG. 17

DRAWING ROOM CABINET (OPEN FOR OILING)

To prepare the cabinet for the oiling of the machine and of the driving mechanism, open the front and side doors of the right end of the cabinet; then oil as instructed on page 4, "To Oil the Machine."

PRICE LIST OF PARTS

NEEDLES, BELTS, ACCESSORIES AND OIL FOR MACHINE NO. 27-4

(V. S. NO. 2 VIBRATING SHUTTLE)

NO.	DESCRIPTION	PRICE EACH	U. S. POSTAGE, EACH
8321	Feed Dog	$ 35	$ 01
2054	Needle Clamp	25	01
8322	Presser Foot	25	01
8327	Shuttle complete	75	02
8228	“ Bobbin	05	01
8231	“ Carrier	35	02
8238	Tension Spring	05	01
26076	Thread Cutter.	05	01
8244	Thread Take-up Spring	05	01
8323	Throat Plate	20	02
26399	Corder complete	2 25	05
286B	Thumb Screw for Presser Foot	10	01
25187	Belt with Hook for Cover Sets	20	02
25134	“ “ “ “ Cabinet Table Sets	20	02
28078	Key	05	02
26460	Oil Can with Cap and Spout	05	03
25112	Pitman for Cabinet Table Sets	25	04
25086	Wrench	10	04

NEEDLES

No. 15, x 1, in packages or three	05	01

OIL IN BOTTLES

1 oz.	each	05
2 “		07
3 “		10

INSTRUCTIONS FOR ORDERING

Be careful to give correct number or name of article desired. When orders amount to less than $1.00, return postage must be included with remittance or order will not be filled.

Goods will not be sent C. O. D. Money must accompany order in every instance.

SINGER
SEWING
MACHINES
THE SINGER MANFG. CO.
TRADE MARK.